REMARKS

Claims 2, 5, 9, 15, 19, 23, 25 and 29 are amended, claims 3 and 14 are canceled, and claims 30-38 are added; as a result, claims 2, 5, 9, 12-13, and 15-38 are now pending in this application.

The amendments and additions to the claims are fully supported by the specification as originally filed, and no new matter will be added by entry of the amendment. The amendments clarify the claims and are not intended to limit the scope of equivalents to which any claim element may be entitled. Applicant respectfully requests reconsideration of the above-identified application in view of the amendments above and the remarks that follow.

Interview Summary

Applicant acknowledges the telephone interview held on 28 December 2004 between the Examiner and Applicant's attorney during which claims 2-3, 5, 9, and 12-29 were generally discussed, as well as the cited references Graham-Cumming, Jr. and McKaughan. The Examiner indicated that further consideration may be required for some proposals. No agreement was reached. Applicant sincerely thanks the Examiner for the interview.

Claims Objections

Claims 5 and 9 were objected to due to informalities. In particular, "the determining operation" of each of claims 5 and 9 allegedly lacked proper antecedent basis. While Applicant respectfully disagrees, for ease of prosecution, claims 5 and 9 have been amended accordingly. Specifically claims 5 and 9 have been amended to recite: "determining whether there is the host application associated with the port number." Claims 15, 19, and 25 have been amended accordingly as well. Claims 5, 9, 15, 19, and 25 have been amended for clarity, and not in response to the prior art as cited by the Examiner.

§103 Rejection of the Claims

Claims 2, 3, 5, 9 and 12-29 were rejected under 35 USC § 103(a) as being unpatentable over Graham-Cummings, Jr., U.S. 6,182,146 ("Graham") in view of McKaughan et al., U.S. 5,802,305. This rejection is respectfully traversed.

The Examiner has the burden under 35 U.S.C. §103 to establish a *prima facie* case of obviousness. *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir.1988). As part of establishing a *prima facie* case of obviousness, the Examiner must show that some objective teaching in the prior art or some knowledge generally available to one of ordinary skill in the art would lead an individual to combine the relevant teaching of the references. *Id.*

The court in *Fine* stated that:

> Obviousness is tested by "what the combined teaching of the references would have suggested to those of ordinary skill in the art." *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 878 (CCPA 1981)). But it "cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination." *ACS Hosp. Sys.*, 732 F.2d at 1577, 221 USPQ at 933. And "teachings of references can be combined *only* if there is some suggestion or incentive to do so."

Id. (emphasis in original).

The M.P.E.P. adopts this line of reasoning, stating that

> "In order for the Examiner to establish a *prima facie* case of obviousness, three base criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ 2d 1438 (Fed.Cir. 1991))." *M.P.E.P.* §2142. (emphasis added.)

With regard to independent claim 2, the Examiner admits on page 3 of the Action that 'Graham does not specifically disclose when there is a host application assigned to the port number; sending a wake-up message to a power-managed host computer...' Instead the Action looks to McKaughan to teach sending a wake-up message to a power-managed host computer. The Action concludes that it would have been obvious to one having ordinary skill in the art:

> "...having the teachings of Graham and McKaughan before him at the time the invention was made, to modify the system and method disclosed by Graham to include power management as taught by McKaughan to obtain sending a wake-up to a power-managed host computer when there is a host application assigned to the port number. The teachings of McKaughan would suggest to one of ordinary skill that power supplied to the entire computer is not necessary to determine if a host application is associated to a port number of a packet. One of ordinary skill would modify Graham, based on McKaughan teachings, by supplying power to the devices needed by the packet analysis module until a determination of the packet is made. Specifically, power would only need to be supplied to the elements in figure 3. If the packet were to be passed on to the application a wake-up message would be sent to power up the computer so that it may be processed. One of ordinary skill would have made the modification to achieve power conservation in a computer system in a network environment in view of the teachings of McKaughan." Office Action, pages 4-5.

Applicant respectfully disagrees.

In determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983); *Schenck v. Nortron Corp.*, 713 F.2d 782, 218 USPQ 698 (Fed. Cir. 1983); *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1143, 227 USPQ 543, 551 (Fed. Cir. 1985); MPEP § 2141.02.

The Examiner must, as one of the inquiries pertinent to any obviousness inquiry under 35 U.S.C. §103, recognize and consider not only the similarities but also the critical differences between the claimed invention and the prior art. *In re Bond*, 910 F.2d 831, 834, 15 USPQ2d 1566, 1568 (Fed. Cir. 1990), *reh'g denied*, 1990 U.S. App. LEXIS 19971 (Fed. Cir. 1990).

The Abstract of the Graham patent describes:

> "a packet analysis module which (sic) performs a two step verification of an application for a packet. In a first step, the packet analysis module applies the ports from a packet to the application-port mapping table to obtain a first application identifier. In a second, separate step, the packet analysis module applies identification logic to the packet to identify an application based on packet data. The second step may be used for each packet or only where the packet is not identified by the application-port mapping table."

As shown and described within Graham, the computer 300 of Figure 4 analyzes packets. If an application identifier is not found, the analyzed packets are merely discarded or passed onto a default application. Figure 6 at 613, 621, 623, and Figure 7 at 723 and 717 of Graham. The computer system of Graham may be exposed to hackers, because the packets of Graham are analyzed within the memory 303 of the computer 300. Figure 4, and column 8, lines 25-38 of Graham.

In contrast to Graham, Applicant's packet may be forwarded to the host computer after filtering to protect the host computer from hackers. In the present independent claims 2, 12, and 23, the wake-up message is sent to the power-managed host computer "*when* there is a host application associated with the port number" (emphasis added). Further, as claimed in independent claim 2, "when there is not a host application associated with the port number," the packet is discarded. Generally, the packet may be discarded or rejected before the host computer may receive the packet so that the host computer may be protected from hackers. See, for instance, page 6, lines 16-18, and page 2, lines 15-24 of the present specification.

The abstract of the McKaughan patent describes:

> "In a computer network including a plurality of interconnected computers, one of the computers being a sleeping computer in a power down state, the sleeping computer having a list of packets to listen for stored (sic) on a network interface card associated with the sleeping computer, a method of waking the sleeping computer from the computer network. An incoming packet of information is transmitted from one of the computers in the network to the sleeping computer. When the network interface card of the sleeping computer detects the incoming packet, it compares the incoming packet to the list of packets stored on the network interface card. If the incoming packet matches one of the packets in the list of packets stored on the network interface card, or if the incoming packet is directly addressed to the sleeping computer, then a signal is issued to wake the sleeping computer. Otherwise, the incoming packet is discarded and the sleeping computer is not awaken."

In contrast to the McKaughan patent, the independent claims 2, 12, and 23 include determining whether there is a host application associated with the port number of the packet, while McKaughan merely teaches comparing "the incoming packet to the list of packets stored on the network interface card" (citing the Abstract of McKaughan).

Considering these apparent differences between the cited references and the Applicant's claims, there is no motivation or suggestion to combine Graham and McKaughan to arrive at the present claims. Therefore, independent claims 2, 12 and 23 are patentable over the cited references.

For the following additional reasons, there is no motivation or suggestion to combine Graham and McKaughan to arrive at the present claims: Graham and Applicant are clearly attempting to solve different problems and therefore seek very different solutions; obviousness may not be found where a modification renders a device inoperable; and obviousness may not be established using hindsight.

I. Invention as a Whole Must be Considered in an Obviousness Test

The test for obviousness under §103 must take into consideration the invention as a whole; that is, one must consider the particular problem solved by the combination of elements that define the invention. *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1143, 227 USPQ 543, 551 (Fed. Cir. 1985). *A patentable invention may lie in the discovery of the source of a problem, even though the remedy may be obvious once the source of the problem is identified.* MPEP §2141.02. (emphasis added.) This is part of the "subject matter as a whole" which should always be considered in determining the obviousness of an invention under 35 USC §103. *In re Spinnoble,* 405 F. 2d 578, 585, 160 USPQ 237, 243 (CCPA 1969). MPEP §2141.02.

In addition to the differences listed above, the problems that the Graham reference and the current application are trying to solve are quite different. Applicant respectfully submits that Graham is directed to solving problems associated with finding an application associated with the packet and with dynamically mapping application and port relationships. Graham attempts to solve these problems by analyzing the packets to find an associated application. This solution is emphasized in Graham where *after* the packet is analyzed, regardless of the outcome, the packet is optionally kept within the computer system. See, for instance, where the packet is passed to a default application after an associated application is not found, at block 623 and block 717 in Figures 6 and 7, respectively.

In contrast, Applicant is attempting to improve computer security and/or to reduce power consumption. See the Applicant's Background, for instance. Applicant attempts to solve these problems by receiving packets at the Applicant's host computer *after* the packets are filtered. See, for instance, page 6, lines 16-18 of Applicant's Original Disclosure. In particular, Applicant attempts to solve these problems by sending the wake-up message to the power-managed host computer *when* there is a host application associated with the port number, as recited in independent claims 2, 12, and 23.

There is no indication in Graham that Graham is attempting to improve computer security and/or to reduce power consumption. In fact, even the Examiner states that Graham is "silent with respect to the power consumption aspect of his particular invention."

Therefore, Graham and Applicant are clearly attempting to solve different problems and therefore seek very different solutions. Accordingly, there is clearly no suggestion or motivation in the cited references or to those skilled in the art to send "a wake-up message to a host computer" as recited in each of the independent, presently-pending claims 2, 12, and 23. For this reason, claims 1, 12 and 23 are patentable over these cited references.

II. Obviousness May Not Be Found Where a Modification Renders a Device Inoperable

Additionally, while it is true that it is the teachings, not the actual physical embodiments, of references that are considered in making an obvious determination under 35 USC §103 (*In re Keller* at 425), on the other hand, it is equally true that if the teachings of a prior art reference would lead one skilled in the art to make a modification which would render another prior art device inoperable, then such a modification would generally not be obvious. *In re Gordon,* 733 F.2d 900, 902, 2212 USPA 1125, 1127 (Fed Cir. 1984).

The addressable memory 303 of Graham includes the software product 304 (packet analysis module 100). Figure 4, and column 8, lines 25-38 of Graham. Graham does not appear to indicate that the network interface 306 includes the software product 304. Graham does not indicate operating the computer in a low power mode.

McKaughan, on the other hand, teaches powering down the computer except for power to the network interface card, before analyzing packets. See 340 of Figure 3, and see Figure 4.

Modifying the computer 300 of Graham as suggested in the Action would render the packet analysis module 100 inoperable. By powering down the computer 300 of Graham, the software product 304 would not have power and thus not be able to execute. Even if the network interface 306 of Graham was with power while the computer 300 was powered down, there is no indication in Graham that the software product 304 (i.e. the packet analysis module 100) would be part of the "powered" network interface 306. Therefore, Graham simply can not operate in low power to analyze packets.

Because obviousness may not be established where a modification renders a device inoperable, the Action does not show that there is some suggestion or motivation to combine Graham and McKaughan. Therefore, the Office Action has not established a *prima facie* case of obviousness for independent claims 2, 12, and 23. Thus, because there is no motivation to combine the references, claims 2, 12, and 23 are patentable over these cited references.

III. Obviousness May Not Be Established Using Hindsight

The Examiner must avoid hindsight. *In re Bond*, 910 F.2d 831, 834, 15 USPQ2d 1566, 1568 (Fed. Cir. 1990). "Obviousness may not be established using hindsight or in view of the teachings or suggestions of the inventor." *Para-Ordnance Mfg., Inc. v. SGS Importers Int'l, Inc.*, 73 F.3d 1085, 1087, 37 USPQ2d 1237, 1239 (Fed. Cir. 1995), *cert. denied*, 117 S.Ct. 80 (1996) citing *W.L. Gore & Assocs. v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 USPQ 303, 312-13, cert. denied, 469 U.S. 851 (1984).

Because the computer 300 of McKaughan teaches *powering down* the computer except for power to the network interface card, before analyzing packets, and because Graham must be *powered on* to analyze the packets and simply can not operate in low power to analyze packets, the only way to combine Graham and McKaughan is through hindsight.

Because obviousness may not be established using hindsight and may not be established in view of the teachings or suggestions of the Applicant, the Action does not show that there is some suggestion or motivation to combine Graham and McKaughan. Therefore, the Office Action has not established a *prima facie* case of obviousness for independent claims 2, 12, and

23. Thus, because there is no motivation to combine the references, claims 2, 12, and 23 are patentable over these cited references.

Because of lack of motivation to combine Graham and McKaughan to arrive at the present claims, the rejection under 35 U.S.C. § 103(a) cannot stand. Applicant respectfully requests reconsideration and allowance of independent claims 2, 12, and 23.

Dependent Claims

Claims 5, 9, 13, 15-22 and 24-29 depend from independent claims 2, 12, or 23 and incorporate all of the limitations therein, respectively. Claims 5, 9, 13, 15-22 and 24-29 are also asserted to be allowable for the reasons presented above, and Applicant respectfully requests notification of same. Applicant considers additional elements of claims 5, 9, 13, 15-22 and 24-29 to further distinguish over the cited references, and Applicant reserves the right to present arguments to this effect at a later date.

The rejections with respect to claims 3 and 14 are moot in light of the cancellation of these claims.

New Claims

Claims 30-38 have been added. Newly added claims 30-38 merely cover other claimable embodiments of the Applicant's invention as supported by the application as originally filed. The new claims do not introduce any new matter. Support for the first and second stage filters of the newly added claims may be found, for example, on page 8, lines 6-18 of the original disclosure.

Applicant believes the proposed new and amended claims are patentable, and that the amendments and additions made herein are within the scope of a search properly conducted under the provisions of MPEP 904.02. Accordingly, Applicant submits that claims 2, 5, 9, 12, 13, 15-38 are patentable.

Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney, Lucinda Price (located in Gainesville, Florida), at (352) 373-8804, or Applicant's below-named representative (located in Minneapolis, Minnesota), if prosecution will be assisted thereby.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 28th day of March 2005.

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